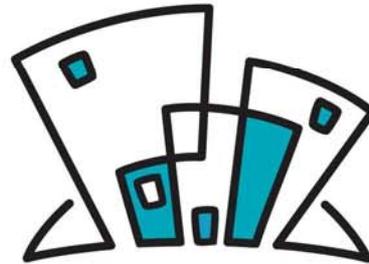


HERS Rater Opportunities in the Affordable Housing Market

Sponsored by
Southern California Edison
Presented by the
Heschong Mahone Group, Inc.



AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE



Affordable Housing Programs That Rely on HERS Ratings

Ratepayer Funded Programs:

- **Multifamily New Construction Programs**
- **Affordable Housing Rehab Programs**

Housing Authority Utility Allowances

- **Energy Efficiency-Based Utility Allowances**
- **Project Specific Utility Allowance Schedules**

Other Funding Source Requirements

- **California Tax Credit Allocation Committee**
- **Enterprise Community Partners - Green Communities Grants**
- **Local Building Departments, Redevelopment and Housing Agencies**

Solar/PV Programs

- **New Solar Homes Program**
- **California Solar Initiative for Low Income Single Family and Multifamily**

Green Building Programs

- **LEED**
- **Build It Green**



California New Homes Programs

Multifamily

Ratepayer Funded Programs

- **Multifamily New Construction Programs applicable to affordable housing**
- **Affordable Housing Rehab Programs**

Energy Efficiency-Based Utility Allowances Adopted and

Implemented by Housing Authorities/Agencies

Project Specific Utility Allowance Schedules

Green building Programs

New Solar Homes Program



SCE California New Homes Program (CANHP)

Multifamily Incentives

- **Qualifying Projects**
 - 3 or more attached units
 - Positive electric energy savings
 - Served by SCE
- **Performance-based Incentives**
 - Exceed Title 24 requirements by at least 15% or 20% - must have positive electric energy savings
 - Incentive = \$150-\$275/dwelling unit (depending on climate zone)
- **Prescriptive Component**
 - ENERGY STAR® appliances (\$30-50/appliance)
 - QII and Verified Ducts (\$50-75/system)



SCE California New Homes Program (CANHP)



AFFORDABLE HOUSING ENERGY EFFICIENCY ALLIANCE

- New Construction **Multifamily** Program
 - **Design assistance**
 - **Performance: Exceed T-24 by 15% and 20%**
 - **Appliances: Individual Measure Incentives**
 - **ENERGY STAR® Option**
 - **Assist with energy component of green building programs**
- Shortage of HERS Raters with experience with high rise residential buildings



Incentive	Performance Level	Incentive Amount	Requirements
Developer Incentive	15% or more	\$150/unit	Coastal Climate Zones 1-7
		\$200/unit	Inland Climate Zones 8-16
Developer Incentive	20% or more	N/A	Coastal Climate Zones 1-7
		\$275/unit	Inland Climate Zones 8-16



AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE

SCE California New Homes Program (CANHP)



Pacific Gas and
Electric Company

COLIN JESSOP

PROJECT MANAGER

Certified Energy Analyst

HERS Rater

HESCHONG MAHONE GROUP, INC.

144 West D Street, Suite 24

Encinitas, CA 92024

(760) 436-7005 (direct) | fax: call ahead

(619) 756-8910 (mobile)

colin.jessop@h-m-g.com



PG&E California Multifamily New Homes Program



- New Construction **Multifamily** Program
 - **Design assistance**
 - **HERS Rater Incentives**
 - **Energy Consultant Incentives**
 - **Performance: Exceed T-24 by 15%**
 - **Appliances: Individual Measure Incentives**
 - **Assist with energy component of green building programs**
- Financial Incentives: At least 15% above code
 - **\$150-\$200/unit Developer Incentive**
 - **\$60/unit HERS Rater Incentive (capped \$12,000/project)**
 - **\$50/unit Energy Consultant Incentive (capped \$10,000/consultant)**
 - **Appliance Rebates**



PG&E Incentive Summary



CA Multifamily New Homes Incentive	Incentive Amount
Developer Incentive	\$150 per unit coastal regions (Climate Zones 1-7) \$200 per unit inland regions (Climate Zones 8-16)
Energy Consultant Incentive	\$50 per unit (\$10,000 per project cap)
HERS Rater Incentive	\$60 per unit (\$12,000 per project cap)
ENERGY STAR® Dishwashers	\$30 per Tier 1 equipment \$50 per Tier 2 equipment
ENERGY STAR® Clothes Washers	\$35 per Tier 1 equipment \$75 per Tier 2 equipment
ENERGY STAR® Refrigerators	\$50 per unit
Natural Gas Clothes Dryers	\$50 per unit
Lighting: High Efficacy Interior Hardwired Fixtures w/ controls	\$10 per fixture



PG&E Performance Program Requirements

- **Project Requirements**

- **New construction (3 or more dwelling units/building)**
- **Exceed 2005 Title 24 part 6 by at least 15%**
- **Positive electric energy savings**
- **Served by PG&E (gas or electric)**
- **Passes plan review and viability checks**
- **Third-party verification by a HERS rater (CHEERS/CalCERTS/CBPCA)**
- **Completion within 30 months of signing the application or December 31st, 2010 (or must request extension)**
- **Submit application prior to December 15th, 2008.**

WWW.h-m-g.com/multifamily/CMFNH

Toll Free Number: (866) 352-7457

CMFNH@h-m-g.com



SCE Affordable Housing Energy Efficiency Alliance (AHEEA)



Services

- Energy Efficiency Design Training
- Affordable Housing Energy Efficiency Handbook
- Financing (NOFA, Tax Credit, EEBUA, etc)
- Programs and Resources
- Design Assistance (new and rehab projects)
- Design Charrettes
- Electronic Newsletter/Web site/Brochure
- Energy Efficiency-Based Utility Allowance Assistance

Julieann Summerford
Heschong Mahone Group, Inc.
summerford@h-m-g.com
760-436-7002



SCE Affordable Housing Energy Efficiency Alliance (AHEEA)



The Affordable Housing Energy Efficiency Alliance (AHEEA) handbook is available online!

To download a free color copy, please visit <http://www.h-m-g.com/multifamily/aheea>



Utility Allowances for Affordable Housing

AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE



An EDISON INTERNATIONAL Company

The Affordable Housing Energy Efficiency Alliance (AHEEA) handbook is available online!

To download a free color copy, please visit <http://www.h-m-g.com/multifamily/aheea>



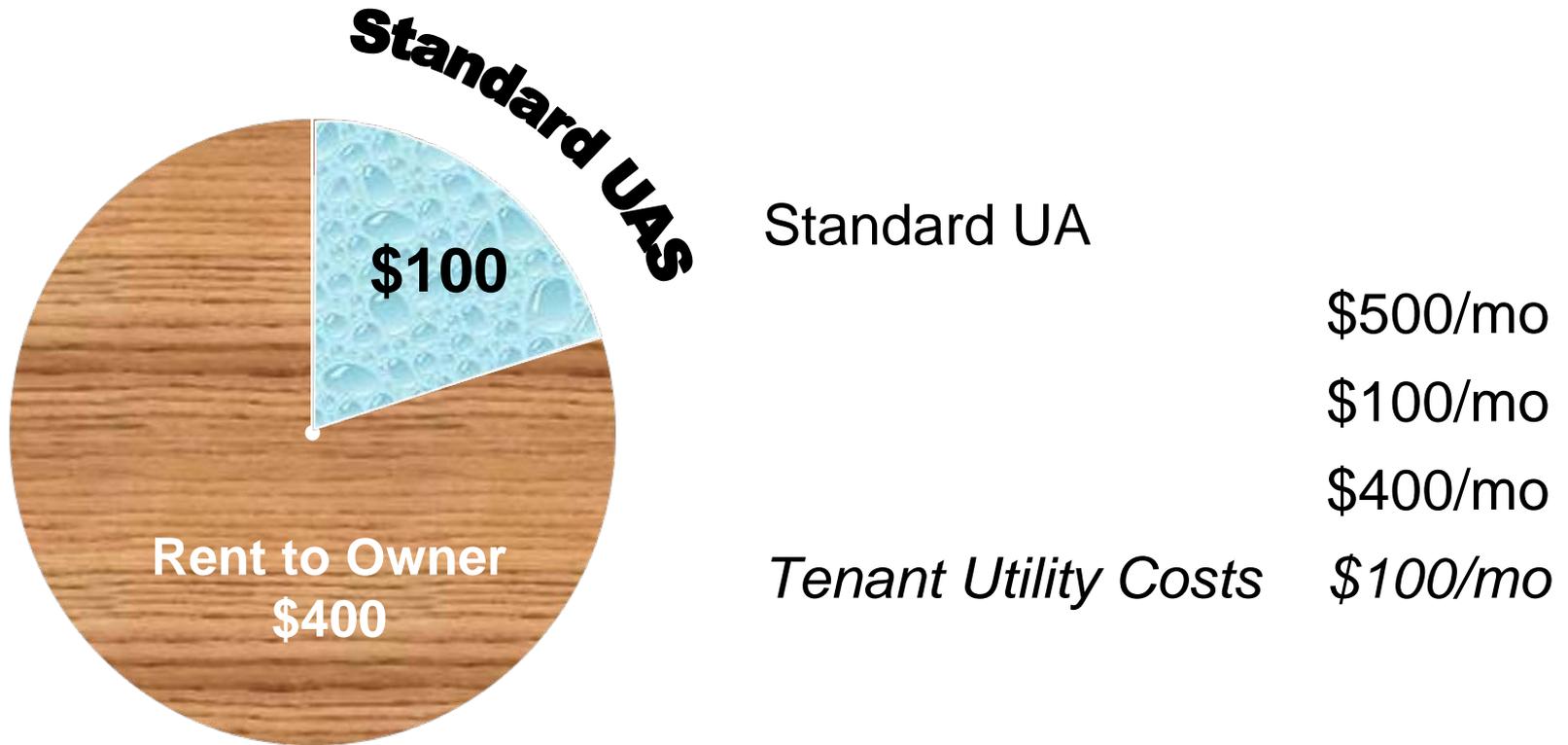
Utility Allowance Schedules for Affordable Housing

- Standard Utility Allowance
 - **Averages utility allowance across all vintages**
 - **Does not consider energy efficient buildings**
 - **Can create artificially high utility allowances**
- Energy Efficiency-Based Utility Allowance
 - **Generic schedule for projects that are 15% above Title 24**
 - **Increases monthly cash flow**
 - **Ability to help pay back investment in energy efficiency**
 - **Ability to generate more \$ in permanent loan financing**
 - **Corrects long-standing problem of artificially high utility allowances**
- Project Specific Utility Allowance Tool
 - **Under development by CEC**
 - **Addresses energy use specific to each project**

All qualifying projects require HERS Verification



Standard Utility Allowance (SUA) Schedule





Energy Efficiency-Based Utility Allowance (EEBUA) Schedule



Standard UA

\$500/mo

\$ 90/mo

\$410/mo

Tenant Utility Costs

\$ 88/mo

Owner's rent increases \$10/mo and tenant's net utility costs decrease \$2/mo without changing total





SCE/SCG Designed for Comfort Rehab Program

AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE

- Projects have to be **at least 20% more energy efficient** than existing conditions
- Energy efficiency measures include:
 - Windows
 - Insulation (walls and roof/attic)
 - Water heating
 - Space heating
 - Space cooling



SCE/SCG Designed for Comfort Financial Incentives

- Up to \$700/dwelling unit for LARGE projects
- Up to \$1500/dwelling unit for SMALL projects
- Up to \$500/unit for Special Needs projects
- Energy consultants (\$40/unit, max. \$5,000/project)
- **HERS raters (\$50/unit, max. \$6,000/project)**
- Energy Smart Pak (worth \$35/pak) provided to install in each unit of participating project

Elizabeth McCollum

Heschong Mahone Group, Inc.

McCollum@h-m-g.com

760-436-7001



SCE/SCG Designed for Comfort

AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE

- Program Eligibility

- **Small Multifamily Projects:** (3) to eight (8) dwelling units (on residential rates)
- **Large Multifamily Projects:** nine (9) or more dwelling units (on residential rates)
- **Special Needs Housing:** special needs tenants with SRO, dorm type units
- **Must be in Southern California Edison and/or Southern California Gas Company service territory**
- **At least 10% of the dwelling units must be occupied by income qualified tenants**
- **Installed qualifying energy efficiency measures must result in a 20% energy efficiency improvement over existing building condition.**
- **Must hire a HERS rater to inspect and verify the energy efficiency measures before and after installation.**
- **May hire an energy consultant to provide design assistance**



Designed for Comfort HERS Rater Role

- **Conduct Existing Conditions Inventory**
 - A California Home Energy Rating Systems (C-HERS) rating and audit must be conducted on each building to establish the existing conditions of a potential rehab project.
 - Building owner contracts with a HERS Rater to perform the initial audit and rating to document existing conditions
 - The HERS Rater may also perform the services of an Energy Consultant. If not, then the HERS Rater submits the building existing conditions to the Energy Consultant
 - Alternatively, a HERS rater certified to use the CHEERS RateTool may use the application to conduct the analysis and recommend building upgrades. This new tool will greatly expand the number of HERS raters with energy audit training



Designed for Comfort HERS Rater Role

- **Conduct Post-Installation Inspection**
 - The HERS rater may, depending upon the choice of measures, perform as inspection during the construction period.
 - Upon completion of the rehab project, a HERS rater will conduct a final inspection to ensure that the recommended equipment is actually installed.
 - The HERS Rater will submit documentation to *DfC* staff certifying that the as-built, upgraded conditions match the simulation performance parameters



California Tax Credit Allocation Committee (TCAC) Funding

Project may be qualify for a maximum of 8 competitive points for sustainable building methods:

- A new construction or adaptive reuse project that exceeds Title 24 energy standards by at least 10% OR
- For a rehabilitation project not subject to Title 24, that reduces energy use on a per square foot basis by 25% as calculated using a methodology approved by the California Energy Commission
 - **Affordable housing rehabilitation projects need an audit of existing conditions, an analysis to determine the measures to achieve 25% - similar to the Designed for Comfort process**



California Tax Credit Allocation Committee (TCAC) Funding

Project may be eligible for a 4%) increase in the Threshold Basis Limits if they include three of the following items:

- Exceed Title 24 standards by at least 15%
- Use tankless water heaters
- Install a high efficiency condensing boiler (92% AFUE or greater)
- Install a solar thermal domestic hot water pre-heating system.
- Use a Minimum Efficiency Report Value (MERV) 8 or higher air-filter for HVAC systems that introduce outside air
- The list includes other green measures



Green Communities Grants

- Grant recipients required to install energy efficiency measures with a 10 year or less payback
 - **Green Communities Grant recipients with rehabilitation projects need an audit of existing conditions, an analysis to determine the measures with a 10 year payback or less**
- Oftentimes, affordable housing owners don't know who to turn to for this expertise
- Opportunity for HERS Raters to audit - and use new CHEERS RateTool for this application



Local Building Departments, Redevelopment and Housing Agencies

- **Local Building Departments are Adopting More Stringent Energy Efficiency and Green Building Requirements**
- **Housing Agency Notice of Funding Availability (NOFA)**
 - Often require or provide competitive points for energy efficiency and green measures, processes, verifications, and planning

Become familiar with your local agency requirements



New Solar Homes Partnership (CEC)

- **The New Solar Homes Partnership (NSHP) requires HERS rater verify energy efficiency measures and the PV system**
 - **Energy Efficiency Measures Requiring Field Verification**
 - Tier I - 15 percent reduction in the residential building's overall energy budget compared to the current Title 24 Standards.**
 - Tier II - 35 percent reduction in the residential building's overall energy budget, and 40 percent reduction in the cooling energy it will need, compared to current Title 24 Building Energy Efficiency Standards.**
- **Requires HERS Rater**
 - **Identify a HERS rater early in planning**



California Solar Initiative for Existing Homes (CPUC)

- **Single Family Low Income Incentive Program**
Under development
 - For more information, please review the CPUC website and then contact Elizabeth Helton at eah@cpuc.ca.gov with additional questions.
- **Multifamily Low Income Incentive Program**
 - Under Development
 - For more information about the multifamily strategy, please contact Luke Tougas at latc@pge.com

**Represents Additional Opportunities for HERS Rater
in Existing Affordable Housing Market**



Build It Green (BIG)

GreenPoint Rated

- GreenPoint Rated is a third-party verification system for the green building measures
- Point values are assigned based on their benefits to the homeowner and the environment and reflect construction practices that exceed California's building and energy code requirements.
- **GreenPoint Rater training is open to all California building professionals interested in adding green ratings to their portfolio of service offerings**

www.builditgreen.org



GreenPoint RATED
A better environment from the inside out.



Build It Green (BIG)

- **To earn GreenPoint Rater certification, meet minimum requirements:**
 - **1. Complete the Green Point Rater Training and pass the comprehensive examinations, including the field test**
 - **2. Hold one of the following current licenses, degrees, or certifications in good standing:**
 - **Certificate to perform Home Energy Rating Systems (HERS) ratings through CHEERS, CalCERTS, CBPCA, or other approved provider**
 - Engineer or Architect License (California)
 - International Code Council (ICC) Building Inspector certification
 - General Contractor's License (California)
 - California Real Estate Inspection Association (CREIA) or American Society of Home Inspectors (ASHI) certification
 - California Office of Real Estate Appraisers (OREA) Real Estate Appraiser Residential License or better (AL, AR, AG)
 - California Building Performance Contractors Association California Building Performance Contractors Association (CBPCA) training certificate
 - California Association of Building Energy Consultants (CABEC) Energy Analyst certification
 - American Institute of Certified Planners (AICP)



AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE

LEED for Homes



LEED
for HOMES

- **LEED for Homes Initiative for Affordable Housing**
 - **The LEED for Homes Initiative for Affordable Housing promotes sustainable building practices specifically for affordable homes**
 - **Goal - reward intrinsic resource efficiencies of affordable housing within the LEED for Homes Rating System**
 - **USGBC is working to develop appropriate tools, educational offerings and technical assistance for the affordable housing market**
 - **USGBC partnering with Enterprise Community Partners to promote green affordable housing**
 - **LEED checklist requires ENERGY STAR® which requires HERS Rating**

www.usgbc.org/leed/homes/



AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE

Time of Sale HERS Ratings

More opportunities on the horizon:

Options for Energy Efficiency in Existing Buildings -
December 2005 California Energy Commission Report

Time-of-Sale Information Disclosure – By 2010, California should begin requiring the disclosure of home energy ratings when a house is sold. Prior to this requirement, the Energy Commission should work with the real estate industry to develop and implement a program for time-of-sale information disclosure, including an informational booklet about home energy efficiency. In addition, the Energy Commission should conclude the Home Energy Rating System rulemaking and ensure that the infrastructure for the time-of-sale requirement is sufficiently in place. Legislative action is recommended.



Opportunities for HERS Raters

- **Affordable housing owners and developers seek**
 - **Expertise for the energy efficiency needs - not so familiar with the energy industry - don't know where to turn**
 - **One stop shopping for their energy efficiency, solar/PV, and green expertise and coordination of inspections and verifications**
- **Become an expert in multifamily and high rise multifamily HERS Rating**
- **Take advantage of utility programs and HERS Rater Incentives**
- **HERS Rating a component of solar/PV green building program rating and verifications**
 - **Expand your certifications and expand your services**
- **Market yourself to the affordable housing industry for both new construction end rehab projects - know their funding requirements**
- **Keep abreast of your local jurisdictions building and funding requirements**



AFFORDABLE HOUSING ENERGY
EFFICIENCY ALLIANCE

Contact Information

Elizabeth McCollum
Project Manager

HESCHONG MAHONE GROUP, Inc.
mccollum@h-m-g.com
760-436-7001

www.h-m-g.com/multifamily